

Amendments to the Specification:

Please replace the paragraph at page 5, line 25 through page 6, line 9, with the following paragraph:

-- As used herein, "calmodulin binding peptide (CBP)" or calmodulin binding peptide means a peptide that binds calmodulin, preferably with a dissociation constant from $1 \times 10^3 \text{ M}^{-1}$ to $1 \times 10^{14} \text{ M}^{-1}$ and preferably $1 \times 10^6 \text{ M}^{-1}$ to $1 \times 10^{10} \text{ M}^{-1}$ and more preferably, $1 \times 10^7 \text{ M}^{-1}$ to $1 \times 10^9 \text{ M}^{-1}$, in a Ca^{2+} dependent manner. Binding occurs in the presence of Ca^{2+} , in the range of $0.1 \mu\text{M}$ to 10mM . CBP is derived from the C-terminus of skeletal-muscle myosin light chain kinase. In the presence of Ca^{2+} , the CBP tag binds to calmodulin and, upon removal of Ca^{2+} , for example, in the presence of a chelating agent such as EGTA (preferably in the range of $0.1 \mu\text{M}$ to 10mM), CBP does not bind calmodulin. In one embodiment, CBP has the amino acid sequence presented in Figure 1. Additional CBP sequences useful according to the invention include: bovine neuromodulin AA 37-53 KIQASFRGHITRKKLKG (SEQ ID NO: 1) (Hinfichsen et al., 1993, Proc. Natl. Acad Sci USA, 90:1585); calmodulin-dependent protein kinase I (CMKI) AA 294-318 SEQIKKNFAKSKWKQAFNATAVVRHMRK (SEQ ID NO: 2); calmodulin-dependent protein kinase II (CMKII) AA 290-309 LKKFNARRKLKGAILTTMLA (SEQ ID NO: 3); and tuberous sclerosis 2 (TSC) ~~WIARLRHIKRLRQRIL~~ WIARLRHIKRLRQRIC (SEQ ID NO: 4) (Noonan et al., 2002, Arch, Biochem. Biophys. 389:32). --

Please replace the paragraph at page 11, line 12 with the following paragraph:

-- Figure 1 shows the sequence of the CBP/SBP tandem affinity tags. Figure 1A shows DNA (SEQ ID NO: 5) encoding peptide sequence (SEQ ID NO: 6) comprising TAP tags fused to the N-terminus of the bait protein. Figure 1B shows DNA (SEQ ID NO: 7) encoding peptide sequence (SEQ ID NO: 8) comprising TAP tags fused to the C-terminus of the bait protein. --

Please replace the paragraph at page 11, line 13 with the following paragraph:

--Figure 2 is a Table presenting SBP sequences useful according to the invention.

SB1 is SEQ ID NO: 9; SB2 is SEQ ID NO: 10; SB3 is SEQ ID NO: 11;
SB4 is SEQ ID NO: 12; SB5 is SEQ ID NO: 13; SB6 is SEQ ID NO: 14;
SB7 is SEQ ID NO: 15; SB8 is SEQ ID NO: 16; SB9 is SEQ ID NO: 17;
SB10 is SEQ ID NO: 18; SB11 is SEQ ID NO: 19; SB12 is SEQ ID NO: 20;
SB13 is SEQ ID NO: 21; SB14 is SEQ ID NO: 22; SB15 is SEQ ID NO: 23;
SB16 is SEQ ID NO: 24; SB17 is SEQ ID NO: 25; SB18 is SEQ ID NO: 26;
SB19 is SEQ ID NO: 27; SB20 is SEQ ID NO: 28. --

Please replace the paragraph at page 11, lines 14 through 15 with the following paragraph:

-- Figure 3(a) and 3(b) show expression vectors comprising nucleic acids encoding CBP and SBP affinity tags useful according to the invention. The nucleic acid sequence shown in Figure 3(a) is (SEQ ID NO: 29). The nucleic acid sequence shown in Figure 3(b) is (SEQ ID NO: 30). --

Please replace the paragraph at page 11, lines 16 through 17 with the following paragraph:

--Figure 4(a) and 4(b) show expression vectors for expression of a "target" binding partner of the invention. The nucleic acid sequence shown in Figure 4(a) is (SEQ ID NO: 31). The nucleic acid sequence shown in Figure 4(b) is (SEQ ID NO: 32). --

Please replace the paragraph at page 12, line 27 through page 13, line 6, with the following paragraph:

-- CBP has 26 residues (see Figure 1) and is derived from the C-terminus of skeletal-muscle myosin light chain kinase, which binds calmodulin with nanomolar affinity in the presence of 0.2mM CaCl₂ (Blumenthal et al., Proc. Natl. Acad Sci USA, 82:3187-3191). In one embodiment of the invention, CBP has the sequence presented in Figure 1. Additional CBP sequences useful according to the invention include: bovine neuromodulin AA 37-53 KIQASFRGHITRKKLKG (SEQ ID NO: 1) (Hinfichsen et al., 1993, Proc. Natl. Acad Sci USA, 90:1585); calmodulin-dependent protein kinase I (CMKI) AA 294-318 SEIKKNFAKSKWKQAFNATAVVRHMRK (SEQ ID NO: 2); calmodulin-dependent protein kinase II (CMKII) AA 290-309 LKKFNARRKLKGAILTTMLA (SEQ ID NO: 3); and tuberous sclerosis 2 (TSC) ~~WIALRLHIKRLRQRI~~ WIALRLHIKRLRQRIC (SEQ ID NO: 4) (Noonan et al., 2002, Arch. Biochem. Biophys. 389:32). --